

IN THE CLAIMS

This listing of claims replaces all prior listings.

1. (Currently Amended) A method in a data processing system for processing a document containing an embedded object having a first format corresponding to a first program, the method comprising the steps of:

initiating loading of the document into a memory of the ~~data~~ data processing system; and while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the first program is an unavailable program, and

when it is determined that the first program is an unavailable program, automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system.

2. (Original) The method of claim 1, further comprising the step of:
receiving an indication of the second format from a user.

3. (Original) The method of claim 2, wherein the data processing system contains a plurality of programs, each with an associated format, and wherein the method further comprises the steps of:

determining which of the plurality of programs are available on the data processing system; and

displaying the associated formats of the available programs to the user.

4. (Original) The method of claim 1, further comprising the steps of:
receiving an indication of a third format from a user;
converting the embedded object into the third format; and
storing the embedded object.

5. (Original) The method of claim 1, wherein the converting step includes automatically identifying the second format.

6. (Original) The method of claim 1, further comprising the step of:
converting the embedded object into an intermediate format prior to converting the embedded object into the second format.

7. (Currently Amended) A method in a data processing system for processing a document containing an embedded object having a first format corresponding to a first program, the method comprising the steps of:

initiating loading of the document into a memory of the data processing system; and
while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the first program is an unavailable program;
and

when it is determined that the first program is an unavailable program,
automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system;

receiving an indication of a third format from a user;

converting the embedded object into the third format; and

storing the embedded object in the third format.

8. (Currently Amended) A method in a data processing system containing a plurality of programs, each with an associated format, the data processing system for processing a document containing an embedded object having an originating format corresponding to an originating program, the method comprising the steps of:

initiating loading of the document into a memory of the ~~data~~ data processing system; and
while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the originating program is unavailable,

when it is determined that the originating program is unavailable,

determining which of the plurality of programs are available on the data processing system,

displaying the associated formats of the available programs to a user, and

receiving an indication of a selected one of the displayed formats from the user; and

automatically converting the embedded object into the selected format.

9. (Currently Amended) A method in a data processing system for processing a document containing an embedded object having a first format corresponding to a first program, the data processing system having a memory, the method comprising the steps of:

initiating loading of the document into the memory;

while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

determining whether the first program is unavailable,

when it is determined that the first program is unavailable,

automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system;

after the document is loaded, receiving a request from the user to edit the embedded object; and

responsive to receiving the request from the user, converting the embedded object into a third format that is suitable for use with a third program that is available on the data processing system.

10. (Currently Amended) A data processing system comprising:

a secondary storage device comprising a target document containing an embedded object having a first format corresponding to a first program;

a memory comprising a computer program that initiates loading of a document into a memory of the data processing system, and, while the document is being loaded as a data stream into the memory, identifies the embedded object contained in the document using an import filter that analyzes the data stream, automatically determines whether the first program is an unavailable program, and, when it is determined that the first program is an unavailable program, automatically converts the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system; and

a processing unit that runs the computer program.

11. (Currently Amended) A computer-readable medium containing instructions that cause a data processing system to perform a method for processing a document containing an embedded object having a first format corresponding to a first program, the method comprising the steps of:

initiating loading of the document into a memory of the ~~data~~ data processing system; and while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the first program is an unavailable program, and

when it is determined that the first program is an unavailable program, automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system.

12. (Original) The computer-readable medium of claim 11, further comprising the step of:

receiving an indication of the second format from a user.

13. (Original) The computer-readable medium of claim 12, wherein the data processing system contains a plurality of programs, each with an associated format, and wherein the method further comprises the steps of:

determining which of the plurality of programs are available on the data processing system; and

displaying the associated formats of the available programs to the user.

14. (Original) The computer-readable medium of claim 11, further comprising the steps of:

receiving an indication of a third format from a user;

converting the embedded object into the third format; and

storing the embedded object.

15. (Original) The computer-readable medium of claim 11, wherein the converting step includes automatically identifying the second format.

16. (Original) The computer-readable medium of claim 11, further comprising the step of:

converting the embedded object into an intermediate format prior to converting the embedded object into the second format.

17. (Currently Amended) A computer-readable medium containing instructions that cause a data processing system to perform a method for processing a document containing an embedded object having a first format corresponding to a first program, the method comprising the steps of:

initiating loading of the document into a memory of the data ~~date~~ processing system;

while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the first program is an unavailable program,
and

when it is determined that the first program is an unavailable program, automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system;

receiving an indication of a third format from a user;
converting the embedded object into the third format; and
storing the embedded object in the third format.

18. (Currently Amended) A computer-readable medium containing instructions that cause a data processing system containing a plurality of programs, each with an associated format, to perform a method for processing a document containing an embedded object having an originating format corresponding to an originating program, the method comprising the steps of:

initiating loading of the document into a memory of the ~~data~~ data processing system; and
while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the originating program is unavailable; and
when it is determined that the originating program is unavailable,

automatically determining which of the plurality of programs are available on the data processing system,

displaying the associated formats of the available programs to a user,

receiving an indication of a selected one of the displayed formats from the user, and

converting the embedded object into the selected format.

19. (Currently Amended) A computer-readable medium containing instructions that cause a data processing system to perform a method for processing a document containing an embedded object having a first format corresponding to a first program, the data processing system having a memory, the method comprising the steps of:

initiating loading of the document into the memory;

while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

determining whether the first program is unavailable, and

when it is determined that the first program is unavailable, automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system;

after the document is loaded, receiving a request from the user to edit the embedded object; and

responsive to receiving the request from the user, converting the embedded object into a third format that is suitable for use with a third program that is available on the data processing system.

20. (Currently Amended) A computer-readable memory device encoded with a data structure with entries, each entry reflecting embedded data in a document that is accessed by a host program which is encoded on the memory device and which is run by a processor in a system, each entry comprising:

a storage area in which is stored a first identifier of an original program that was utilized during creation of the embedded data and in which is stored a second identifier of an available program to be used for automatically converting the embedded data and accessing the embedded data when the original program becomes unavailable in the system,

wherein the available program is different than the original program, and

wherein, while the document is being loaded as a data stream into the memory, the host program:

identifies the embedded object contained in the document using an import filter that analyzes the data stream,

determines whether the first program is unavailable, and

when it is determined that the first program is unavailable, automatically converts the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system.

21. (Original) The computer-readable memory device of claim 20, wherein the second identifier replaces the first identifier.

22. (Original) The computer-readable memory device of claim 20, wherein the original program becomes unavailable because the original program is not installed on the system.

23. (Original) The computer-readable memory device of claim 20, wherein each entry includes a second storage area in which is stored the embedded data in a format suitable for use with the original program and in which is stored the embedded data in a format suitable for use with the available program.

24. (Original) The computer-readable memory device of claim 23, wherein the embedded data in the format suitable for use with the available program replaces the embedded data in the format suitable for use with the original program.

25. (Currently Amended) A data processing system for processing a document containing an embedded object having a first format corresponding to a first program, the data processing system comprising:

means for initiating loading of the document into a memory of the data ~~date~~ processing system; and

means for, while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

automatically determining whether the first program is an unavailable program, and

automatically converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system, when it is determined that the first program is an unavailable program.

26. (Currently Amended) A method in a data processing system comprising a document with data in a native format and with embedded data in a nonnative format, the embedded data suitable for use with a first program, the method comprising the steps of:

initiating loading of the document into a memory of the data ~~date~~ processing system; and
while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

receiving an indication of a different format suitable for use with a different program; and

automatically converting the embedded data into the different format, when it is determined that the first program is an unavailable program.

27. (Original) The method of claim 26, wherein the receiving step includes the step of:

receiving the indication from a user.

28. (Original) The method of claim 26, wherein the receiving step includes the step of:

retrieving the indication from storage.

29. (Cancelled)

30. (Cancelled)

31. (Currently Amended) A computer-readable medium containing instructions that cause a data processing system to perform a method, the data processing system comprising a document with data in a native format and with embedded data in a nonnative format, the embedded data suitable for use with a first program, the method comprising the steps of:

initiating loading of the document into a memory of the data ~~date~~ processing system; and
while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

receiving an indication of a different format suitable for use with a different program; and

automatically converting the embedded data into the different format, when it is determined that the first program is an unavailable program.

32. (Original) The computer-readable medium of claim 31, wherein the receiving step includes the step of:

receiving the indication from a user.

33. (Original) The computer-readable medium of claim 31, wherein the receiving step includes the step of:

retrieving the indication from storage.

34. (Cancelled)

35. (Cancelled)

36. (Currently Amended) A method in a data processing system for processing a document containing an embedded object having a first format corresponding to a first program, the method comprising the steps of:

initiating loading of the document into a memory of the ~~data~~ data processing system;

while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

determining whether the first program is an unavailable program, and

when it is determined that the first program is an unavailable program, converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system; and

selecting a user selectable setting comprising at least a first setting for automatically performing the step of converting while the document is being loaded into memory and a second setting for performing the step of converting upon selection of the document for editing.

37. (Currently Amended) A computer-readable medium containing instructions that cause a data processing system to perform a method, the data processing system comprising a document with data in a native format and with embedded data in a nonnative format, the embedded data suitable for use with a program, the method comprising the steps of:

initiating loading of the document into a memory of the ~~data~~ data processing system;
while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

determining whether the first program is an unavailable program, and

when it is determined that the first program is an unavailable program, converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system; and

selecting a user selectable setting comprising at least a first setting for automatically performing the step of converting while the document is being loaded into memory and a second setting for performing the step of converting upon selection of the document for editing.

38. (Currently Amended) A data processing system for processing a document containing an embedded object having a first format corresponding to a first program, the data processing system comprising:

means for initiating loading of the document into a memory of the ~~data~~ data processing system;

means for, while the document is being loaded as a data stream into the memory,

identifying the embedded object contained in the document using an import filter that analyzes the data stream,

determining whether the first program is an unavailable program, and

converting the embedded object into a second format different from the first format that is suitable for use with a second program that is available on the data processing system when it is determined that the first program is an unavailable program; and

means for selecting a user selectable setting comprising at least a first setting for automatically performing the step of converting while the document is being loaded into memory and a second setting for performing the step of converting upon selection of the document for editing.